

Ortho-imagery Technical Working Group

Idaho Geospatial Committee

Meeting Summary

Friday April 12, 2002

Noon - 1:00 PM

2002 Intermountain GIS Users Conference

Big Sky Resort

Big Sky, Montana, 59716

Summary Prepared by: Bruce Godfrey

Persons Present:

Nathan Bentley, State GIS Coordinator - ITRMC Staff

Tracy Fuller, Idaho USGS Mapping Liaison – USGS

Dan White, Cartographer - USDA Forest Service, Ogden, UT

Bruce Godfrey - University of Idaho Library

The purpose of the meeting was to (1) identify standards for an Ortho-imagery framework layer, (2) inventory existing DOQ data, (3) develop costs estimate for completion of the data layer, and (4) discuss a strategy for completing the data layer.

Standards for an Ortho-imagery Framework Layer:

All present agreed that U.S. Geological Survey (USGS) 1-meter ground resolution, Digital Orthophoto Quadrangles (DOQ) (1:12,000-scale, 3.75- x 3.75-minute in extent [commonly referred to as Digital Orthophoto Quarter-Quadrangles or DOQQ]) currently set the standard for the layer. The proliferation of new technologies will likely result in other products replacing USGS DOQ's in the future. However, currently, completion of once-over 1-meter USGS DOQ coverage for the state will provide an Ortho-imagery base control layer allowing for vertical integration of all other Framework layers.

Inventory of Existing DOQ data:

By Tracy's calculations, 768 3.75-minute quadrangles are currently in progress (Figure 1), many being worked on by the U.S. Forest Service, Geospatial Service and Technology Center (GSTC) with 2003 completion dates.

Additionally Tracy noted that, 532 3.75-minute (133 7.5-minute) USGS DOQ's are required to complete once-over, 1-meter digital orthophoto coverage for the state (Figure 1). There is no authorization or work-in-progress currently on these 532 3.75-minute USGS quadrangles.

Bruce noted that The University of Idaho Library has 2710 DOQ's (spatially organized by 3.75-minute quadrangle) available for download in USGS native single-file format

and that the Idaho Department of Lands has an extensive collection of DOQ's (spatially organized by 7.5-minute quadrangle) available for download in MrSID format.

Cost Estimates for Completing the Layer:

All present came to the conclusion that \$426,000 is required to complete the first generation, 1-meter digital orthophoto coverage for the state. This estimate is based on the current cost of \$800.00 to produce one 1:12,000-scale, 3.75-minute DOQ for the 532 3.75-minute quads.

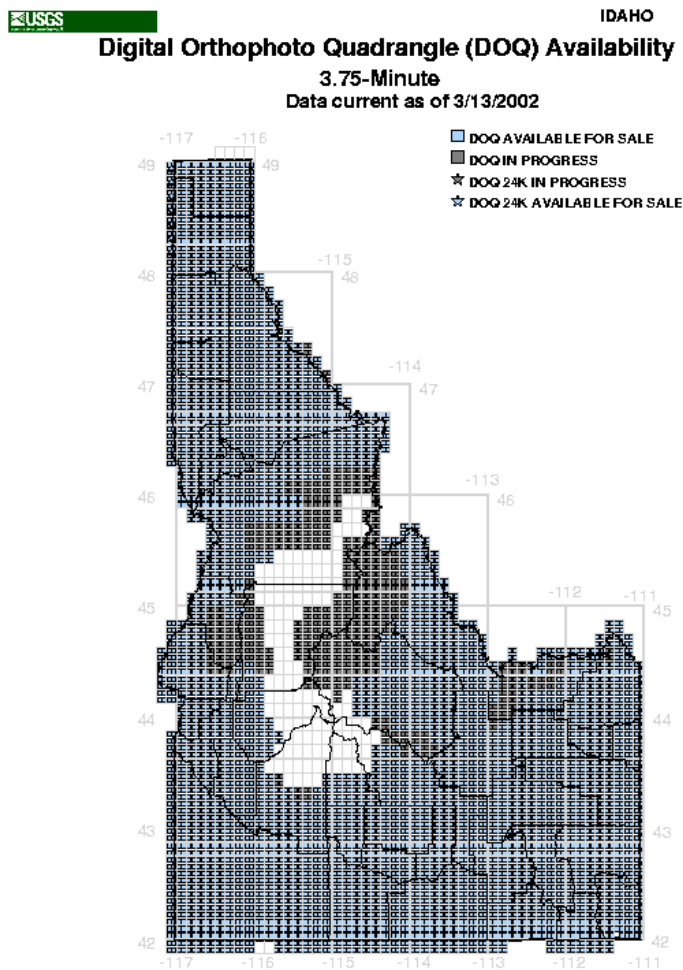


Figure 1. Digital Orthophoto Quadrangle (DOQ) Availability
[http://mcmweb.er.usgs.gov/status/rmmc/id/id_doq.html].

Strategy for Completion:

All present discussed ways to fund the completion of once-over coverage of the state and believe the goal can be attained through coordination between the USGS, U.S. Forest Service, state agencies, counties, and possibly Legislation if necessary. If the Idaho Department of Transportation, Idaho Department of Water Resources, Idaho Department of Lands, Idaho State Tax Commission, Idaho Department of Environmental Quality, and Idaho Department of Agriculture could provide \$25,000 each, \$150,000 in state money could be contributed. That amount would grow to \$300,000 with USGS 50% co-operation money leaving \$126,000 from DOI High Priority money for 2003. Tracy indicates that he could swing that with the DOI agencies. Possibly, some of the individual forests and counties could come through with some funding to ease some of the burden on the state agencies. Further discussion on this topic needs to take place at the next meeting.

Additional Notes:

While all present agreed that once-over USGS DOQ coverage for the state is a top priority, the Ortho-imagery I-Team Plan should include (in the form of an extension?) all types of imagery becoming available. For example, imagery such as SPOT and Landsat are of significant importance to many in the state and should be addressed in the I-Team 'business plan' for the layer. Cost and data-sharing agreements for all imagery should be explored.

A 1-meter USGS DOQ data layer for the state may serve as an Ortho-imagery base layer for vertical integration of all Framework layers. Methods to update the layer with more recent imagery must be explored. One model of how this might be achieved is the USGS National Map Pilot Project in northern Idaho and eastern Washington. Monies contributed by USGS to local imagery creators will result in a public domain, 1-meter ortho-imagery product for the study area. Forging partnerships and agreements such as this in all parts of the state may result in cost effective updates to the ortho-imagery layer. Ways to foster these cost-sharing partnerships need to be discussed at future meetings.

Bruce is going to work on a rough draft of the Ortho-imagery I-Team document for the next meeting. Follow-up discussion will take place on ways to fund the completion of the Ortho-imagery layer. The next meeting will probably take place in Boise in May.